men are very anxious to learn these things, but have always looked upon the knowledge of the physician as though it were esoteric wisdom, and not for the comprehension of ordinary folk. Show them the real meaning of medical ethics and they will be sympathetic where now they are but scoffers.

SUPPORT THE ASSOCIATION.

Doubtless but few of us realize as yet the tremendously valuable work which is being done for the medical profession of this country by the American Medical Association, through its Council on Pharmacy and Chemistry. The work of the Council is entirely a labor of love. The Councillors receive no compensation, we believe, for the work which they are doing for us, and the actual expenses of doing the work, which are borne by the Association, must be very great. Shall all this work and this expense be thrown away? That is a question which the medical profession of the country must decide; it is up to you, individually, as much as to anyone else. Will you follow the work of the Council, recognize the frauds it discloses and bear them in mind; will you refuse to use or recommend any of the extra-pharmacopeal preparations presented to you, unless they have passed the close scrutiny of the Council and received its approval? That, it would seem, is about the least that you as a self-respecting physician, can do in justice to yourself and your patient. Any remedial preparation that you do not find in the list of "new and non-official remedies," as issued by the Council, is one to look upon with suspicion; it *may* be a good and legitimate product, but the chances are that it is not, or that the proprietors have uttered exaggerated statements as to its value. The JOURNAL will print, every month, a list of all preparations approved by the Council. Look for it, study it, keep it handy for reference.

EXCELLENT AGREEMENT.

From the *Pennsylvania Medical Journal* we learn that one of the county medical societies of that state has had a meeting with the pharmacists and come to a most excellent agreement. The pharmacists have undertaken to stop dressing their windows with nostrum displays, to stop counter prescribing, to discourage the use of nostrums and "patent" medicines, and to refer patrons to physicians. On their part, the physicians have agreed to stop prescribing "proprietary" preparations so far as possible, to stop dispensing and to confine their prescriptions to preparations of the Pharmacopeia and the National Formulary. We certainly wish the physicians and pharmacists of Monessan County, Pennsylvania, every success in the carrying out of their undertaking. If such an agreement could be made, and then lived up to, in every county in the United States, everybody concerned, including the patient, would be better off. Are there not some active, wide awake county societies in California that will take this matter up?

REMARKS ON THE PRESENT STATUS OF INTRANASAL SURGERY.*

By LOUIS C. DEANE, M.D., San Francisco.

In the past six years such rapid strides have been made in intranasal surgery that those who have not kept in active touch with the workers in this field and with the literature, can hardly conceive the splendid progress that has been made and of the remarkable achievements of such men as Killian, Hajek, Jansen, Luc and Grunwald.

An altogether new era has dawned. A new field has been entered which has hitherto remained unexplored. New methods have been devised, with new instruments, to meet the demand. These seem sweeping assertions, but allow me a few words regarding nasal therapy and surgery of a few years ago, within the remembrance of us all, and practiced by the best.

First with regard to therapy. Sprays and douches were in great vogue and various aqueous, alkaline and stimulating oils were used with but little result; then came a long list of local applications, among them the silver salts, iodine, glycerin with icthyol, tannin, salts of zinc, etc., again followed by little or no result; and so "catarrh" has been impressed upon the laity as being well-nigh incurable.

What chloroform and ether have been to the general surgeon, so cocain has made possible our present methods of intranasal surgery. It was first used in 1884, but ten years had to elapse before real accuracy and practice were acquired. With the aid of the active principle of the suprarenal capsule, which, with cocain, has made intranasal operations bloodless as well as painless, we have really entered upon a new era of surgery of the sinuses of the head.

First efforts were naturally directed to the removal of obstruction to the passage of air through the nose, and so the cautery, the snare, the saw and scissors constituted the most important part of the rhinologist's armamentarium. He reasoned that if the hindrance could be removed, it would have a checking influence on the discharge, which presumably came from the mucous membrane covering these parts.

The first ten years following the advent of cocain were devoted to removing polypi, sawing or burning off sharp septal spurs and the removal of inferior and middle turbinates. One can not deny that much relief was thus afforded which in most, though modified instances, is practiced today. In a large proportion of cases profuse muco-purulent discharge remained unabated or even increased. Prolonged and severe headaches which seemed only to point to that region were unaffected. It has remained for recent investigators to probe into the nasal sinuses as the real seat of purulent nasal discharge and conclude that chronic closed empyema of these sinuses is a most common cause for severe and persistent headaches.

The position and anatomical relation of these

*Read before the San Francisco County Medical Society.

nasal sinuses, or better, cranial sinuses, has been well known for centuries, for Galen referred to the ethmoid cells as a sieve for the cerebral fluids, and in 1550 Berenger, opposing the views of Galen, described these cells in detail. Vaselius in 1515 described the maxillary, frontal and sphenoidal sinuses and in 1651 Nathaniel Highmore reported a case of suppurative disease of the antrum of Highmore, from whom it received its name, followed by Velpeau, Molinetti, Mabonius and in the eighteenth century by Wm. Cooper, Lamorries and Jourdain, who operated externally upon these sinuses and laid down rules of surgical procedure. So to the present day a certain amount of surgery has been practiced externally upon these parts for acute empyema, tumors, etc.

It was not until 1891, when Bosworth published a paper on various diseases of the ethmoid cells, followed shortly by Gruenwald on affections of the frontal sinus, that anything was really known regarding their pathology.

Here we have the nasal cavities separated from each other by a bony and cartilagenous partition and directly devisable, in themselves, into three passage ways and three prominences running anteroposteriorly. It was these bold structures which naturally attracted the attention of the first workers and operations, such as have been mentioned, were performed upon them. Little thought was given to a series of from ten to twenty air cells surrounding these nasal cavities, lined with mucous membrane and in such close apposition that it was with difficulty that anatomists classified them, singly or in groups, except by the manner in which they were connected by orifices with the nasal cavities.

I will ask your privilege to devote only a moment to enumerating them, not that their anatomical situation may not be familiar, but it is the relation they bear to each other that is engrossing the attention of our present-day workers.

To be brief, we have the frontal sinuses which are *not* classified as anterior ethmoid cells because they connect separately by the infundibulum with the middle meatus of the nasal cavities. Bounding the upper and outer portion of the nasal cavities, are the anterior and posterior ethmoid cells, so divided because the anterior group are connected with the middle meatus and the posterior with the superior meatus. Then the sphenoidal sinuses, which are not classified as posterior ethmoids because, as the frontal sinuses, they have individual orifices. Finally, the maxillary sinuses, which lie to the outer side of the nasal cavities and below the posterior ethmoids. They have their openings into the middle meatus in close proximity to the nasal orifices of the frontal and ethmoid sinuses.

So here are a series of cavities, in absolute contact with each other, all in direct communication with the nasal cavities. They are moist, warm and dark and so arranged that a discharge from one can and does enter the nasal orifice of the other. Is it not to be wondered at that these recesses are not more often the seat of disease and their inaccessibility has taxed the resources of the intranasal surgeon to the utmost?

Throughout this paper I have used the term intranasal surgery, because it is the intranasal route of approaching these sinuses that has really worked the present era of advancement. I do not wish to convey the idea that the intranasal route is the only way, for in many instances such an approach is contraindicated; but the almost universal method of opening these sinuses from without is gradually giving way to more rational methods in our increasing knowledge of the nasal cavities and the relation the various sinuses bear to them.

It is with considerable interest that one stands and watches Killian, of Freiburg, perform his famous operation upon the frontal sinus whereby the entire cavity is obliterated by the complete removal of the anterior and inferior walls. It is with equal wonder that one observes Jansen of Berlin remove the entire anterior wall of the maxillary sinus and by continuing in this path convert as well the posterior ethmoids and sphenoid into one; and again, Coffin, of New York, who enters the anterior ethmoids near the bridge of the nose and continuing backward with the curette successively opens the posterior ethmoid and sphenoidal sinus. Far be it from my purpose to question, at times, the advisability of such methods; only it is rarely necessary to resort to such extreme and disfiguring measures.

By the intranasal route these same sinuses can and are being entered and treated as almost a daily practice of the rhinologist, with hardly the appreciation by the patient that an operation has been performed; without interference with his daily routine and without disfigurement. This has been rendered possible by such men as Rethi, Bayer, Kaspariantz and Onodi, who from 1896 to 1900 published papers and made suggestions as to the opening of the antrum through the nasal cavity. Then followed Claoue, of Bordeaux, in 1902; Curtis, of New York, in 1903; Escot, in 1904, and Cavello, of Turin. Based largely upon the efforts of these men the Caldwell-Luc operation, for the approach of the antrum by removing a large portion of the nasoantral wall, curetting and packing, followed by irrigating and drying by streams of air, stands today as a most thorough and practical procedure.

The obliteration of the ethmoid cells through the ethmoid bulla is largely due to Hajek, Gruenwald, Myles, Luc and Bryan, who, with their special cutting and biting forceps and curettes, have rendered these apparently inaccessible cavities easy of access by the intranasal route.

Hajek, in a recent edition of his unexcelled treatise on the accessory sinuses, published in Leipzig and Vienna in 1903, shows such great regard for the intranasal route in the treatment of the frontal sinus that it is worthy of notice. He lays special stress upon resection of the anterior part of the middle turbinate and removal of polypi, hypertrophies, spurs and other pathological conditions which obstruct the ductus naso-frontalis. Such measures are not only frequently effectual in acute cases, but in the chronic cases themselces, so long as deep-seated muco-perios-

teal degeneration or destruction of the bony wall of the cavity has not already taken place. The Fletcher Ingals method of enlarging the naso-frontal duct by especially devised drills, with the use of curette and packing, seems to be a most rational treatment, though I have not had any personal experience with it. We owe, also, much to Dr. Mosher, of Boston, for his recent studies on the normal relations and anomalies of these parts.

I will finish with a few words regarding the sphenoidal sinus, for it is only within the last few years that any efforts have been made to gain access to it. Myles, Bryan and Wright of this country were among the first to attempt any operative procedures through the nasal route, followed more recently by Curtis, Behrens, Henkel and Coakley, who have demonstrated most effective surgical measures for the treatment of its diseases. While other methods have been devised for entering the sphenoidal sinus, such as the fronto-ethmoidal route as practiced by Killian, the orbito-ethmoidal route of Coffin, and the maxillary route of Jansen, the intranasal route commends itself as being the only one used for diagnostic purposes and the natural channel to follow in the treatment of its diseases. It is here only that one can enter the sinus directly, without proceeding through other sinuses to convey or receive infection. The method used consists of irrigating through its normal opening or breaking down its anterior wall and curetting and packing its interior.

In speaking of recent advancement in intranasal surgery, I have purposely avoided any particular mention of the submucous resection of the cartilaginous and bony septum as advocated by Killian and Hajek and more recently elaborated upon by Ballenger and Freer of Chicago. With its novelty and all the ingenuity shown by these operators, it can never take precedence over the more vital subject of the sinuses.

Each year brings forth new and interesting details concerning intranasal surgery, and some may feel that so much has been achieved in the past few years that little else remains to be accomplished. It is for each to acquire a more intimate knowledge of these parts so as to render us more able in our judgment of pathological conditions and more bold and thorough in our treatment.

REPORT OF A CASE OF ACUTE PANCREATITIS. AUTOPSY FINDINGS. WITH A SHORT REVIEW OF THE CASE.

By J. W. JONES, M. D., Orange, and J. M. BURLEW, M. D., Santa Ana.

Mrs. P., age 56. Gave a previous history of several acute gall-stone attacks. Otherwise history of no importance. On December 27th, was out driving, and complained of not feeling well. At 12:30 a. m. of the following day medical advice was called. She was found in a dorsal position in an agony of pain. Complained of pain under ribs of right side. Examination showed a very large woman, abdomen pendulous. The face was bathed in beads of cold sweat, expression anxious and features drawn, skin clear, sclera clear. There was constant ineffectual wretching. No rigidity of abdomen. Percussion note normal everywhere. Upon deep palpation, marked tenderness over gall bladder. Temperature normal. Pulse normal. All symptoms seeming to point to gall stone colic, one-fourth grain morphine sulphate was given hypodermically. A mixture of calomel, ipecac and sodium bicarbonate was ordered to be followed by magnesium citrate. By 6 a. m. pain had become so severe in spite of morphine by mouth that a hypodermic of three-eighths of a grain of morphine was given and mustard plaster placed over stomach. The bowels had not moved. An enema of soap and water resulted in bringing away some hard fecal material and considerable gas. Abdomen was showing signs of distension and tenderness becoming rather diffuse. At intervals small amounts of dark brown liquid was vomited. At 2 p. m., bowels not having moved, two ounces of epsom salts were given per rectum. This was retained about one hour and returned almost clear. At 1 a. m. on the morning of the 29th, vomiting had become very severe, constantly throwing up water that had been taken in the form of cracked ice. Capsules of cocaine gr. ½ and menthol gr. 1, every three hours controlled this for twenty-four hours. Distension of the bowels continuel to increase. On the morning of the 30th, soap and water enemas were given every three hours. They were expelled usually in about half an hour almost clear, unaccompanied by gas. At 3 p. m. began to show symptoms of heart failure, and cyanosis was marked over the abdomen and at finger tips. Stimulation was given in form of strychnine. At 6 p. m., Dr. C. D. Ball was called in consultation. Temperature at this time was 100°, the first time it was above normal since attack. It seemed to us the condition was either fecal impaction or paresis of the bowels, accompanying gall stone attack. Stimulation was continued and ineffectual efforts to move bowels by enemas of oil. Patient remained clear in mind, but strength gradually failed death taking place at 4:30 on the morning of the 31st.

A partial autopsy was allowed, the abdomen being opened. Everywhere, scattered throughout the great omentum and mesentery, were small white punctuate areas beneath the surface of the peritoneum. There was a small amount of free bloody fluid in the abdominal cavity. The gall bladder was free from adhesions, and tensely distended with a small amount of thick dark fluid and hundreds of gall stones ranging in size from those just perceptible up to a hazlenut. There were very few of the larger ones. Two small stones could be felt in the common duct but none lodged in the diverticulum of Vater. The pancreas was distended to three or four times its normal size and was very friable, breaking up into a gangrenous mass on any attempt to handle or remove it. Upon microscopic examination the small white areas in the omentum proved to be areas of fat necrosis. That the

* Read before the Orange County Medical Society.